Claim(s)

1. A stereoscopic image display device without glasses comprising image display means for displaying a left eye image and a right eye image in alternate stripe shapes, shading means for shifting a position of a shading part for generating binocular parallax effect, and a sensor for detecting a head position of a viewer, wherein

area shifting and division control means for dividing the shading means into areas in a horizontal direction and controlling shifting of a shading part in each of the areas.

2. The stereoscopic image display device without glasses according to claim 1, wherein

the shading means is so structured that a position of the shading part shifts by 1/4 pitch of a pitch of the shading part.

3. The stereoscopic image display device without glasses according to claim 1, wherein

display control means for dividing a display part of the image display means into areas by corresponding to division of the shading means into the areas and controlling a display order of the left eye image and the right eye image in stripe shapes in each of the areas depending on a head position of the viewer is provided.

4. The stereoscopic image display device without glasses according to claim 1, wherein

the image display means comprises a liquid crystal display panel, the shading means is a shading barrier arranged between the liquid crystal display panel and a light source for emitting light in a flat shape arranged on a back side of the liquid crystal display panel.

5. The stereoscopic image display device without glasses according to claim 1, wherein

the shading means is a parallax barrier arranged on a light emission side of the image display means.

6. The stereoscopic image display device without glasses according to claim 1, wherein

the shading means comprises a liquid crystal panel.

7. The stereoscopic image display device without glasses according to claim 1, wherein

the shading means comprises a continuous shading part and a liquid crystal shutter part for turning on and off the shading part provided on both sides of the continuous shading part.

8. The stereoscopic image display device without glasses according to claim 7, wherein

an aperture ratio equivalent to a boundary part of divided areas of the shading means are approximately uniform.

9. The stereoscopic image display device without glasses according to claim 7, wherein

a liquid crystal shutter provided on both sides of the continuous shading part sandwiching the aperture part which is equivalent to the boundary part is wired so as to be in a same group of a liquid crystal shutter in an other adjacent area.

10. The stereoscopic image display device without glasses according to claim 1, wherein

the number of divided areas increases as the head position of the viewer is apart from an optimum viewing position.

11. The stereoscopic image display device without glasses according to claim 1, wherein

division into areas are uniformly provided.

12. The stereoscopic image display device without glasses according to claim 1, wherein

control of each of the areas is provided so as to supply an image for a dominant eye to the dominant eye of the viewer.

13. The stereoscopic image display device without glasses according to claim 1, wherein

the shading part of the shading means is structured so that the shading part disappears in an optional area so as to display a two-dimensional image on a display area corresponding to the optional area without the shading part.